

REMARKS

This paper is being filed in response to the Office Action mailed February 21, 2006. The February 21, 2006 Office Action was a final rejection. Applicants request entry of this Amendment because it is believed that the Amendment will place the application in condition for allowance. If this Amendment is entered, claims 1 - 9 and 11 - 20 are pending. Applicants request entry of the Amendment, reconsideration, and a Notice of Allowance.

A. Supplemental Information Disclosure Statement

Applicants are submitting herewith a Supplemental Information Disclosure Statement. Cited on the Supplemental Information Disclosure Statement is Publication US 2004/0226443 A1. The '443 publication was published on November 18, 2004. It is a continuation of an application filed on May 31, 2001, which claims priority under 35 U.S.C. § 119(e) to a provisional patent application filed September 5, 2000.

The '443 publication was raised by Examiners Pham and Smith in the personal interview on April 7, 2006. A description of the interview is included below.

The '443 publication is assigned to Donaldson Company, Inc. Donaldson Company, Inc. is also the assignee for this application, Serial No. 10/731,564. At the time the invention was made in this application (Serial No. 10/731,564) and at the time the invention was made in the '443 publication, both were subject to assignment to Donaldson Company, Inc. Because the '443 publication, at the time of the invention, was subject to assignment to Donaldson Company, Inc. and the currently pending application was subject to an assignment to Donaldson Company, Inc. at the time the invention was made, the '443 publication is not available as prior art under 35 U.S.C. § 102(e)/103. In addition, the '443 publication does not disclose each element of the claims, and therefore, cannot act as a reference under 35 U.S.C. § 102(e). This is discussed further below.

The Examiner is requested to initial the enclosed Form 1449 to indicate her consideration of the '443 publication.

B. Summary of the Interview

The undersigned (Julie Daulton) representing the assignee, Donaldson Company, Inc., conducted a personal interview with Examiners Pham and Smith on April 7, 2006. Thomas Gahr, a representative from Donaldson Company, Inc., was also present.

The undersigned had submitted proposed amendments to Examiner Pham in advance of the personal interview. Examiner Pham acknowledged receipt of the proposed amendments.

Mr. Gahr had brought a filter element constructed in accordance with principles of the disclosure. The filter element brought to the interview by Mr. Gahr and shown to the Examiners was constructed very similarly to the filter element shown in exploded view in Figure 6 of the application. Mr. Gahr pointed out the features of the filter element and explained the principles of operation. He also showed photographs of gas turbine intake systems.

The undersigned discussed U.S. Patent No. 4,904,282 to Stuble et al. The overall operation of the device in the '282 patent was summarized to the Examiner. One passage discussed in the '282 patent includes column 5, lines 10 - 12. In the final Office Action, the Examiner had relied upon this passage to demonstrate that Stuble allegedly discloses the method of cleaning filters by either blowing or sucking through the filters. The undersigned explained that Stuble '282 is referring to, at that passage, that the air to be purified can be blown or sucked through the filter device. This passage in Stuble '282 is not referring to the method of cleaning the filters themselves. The methods for cleaning the filters in the '282 patent operates on a negative-pressure source (suction).

The Examiners raised Publication US 2004/0226443 and pointed out the disclosure of reverse pulse cleaning of filter elements for a gas turbine air intake system. The Examiners also pointed out the passage on page 12, paragraph 92, which discusses a Z-filter structure. The undersigned indicated that she would study this '443 publication and provide a written response. This is provided in Section C, below.

The undersigned went through the pending claims with the Examiners. Independent claim 1 was discussed, including its overall combination of steps, including the step of the pressurized fluid turning at an angle of less than 80° to flow into the downstream flow face. See, Applicants' specification beginning at page 9, line 26 through page 10, line 10. At least this

portion of the specification discusses advantages that result from this particular arrangement claimed.

Independent claim 9 was discussed, including the overall combination of limitations claimed for the filter element. Claim 9 recites, as part of the overall combination, the fact that the first media construction forms a non-rectangular parallelogram, and the second media construction forms a non-rectangular parallelogram. Claim 9 also recites that, for this particular combination, the first media construction and the second media construction are angled relative to each other to form a V-configuration having an apex. This combination of elements has advantages and results in a particularly useful configuration. Certain of the advantages are discussed on pages 9 and 10, with respect to the slanted block forming a non-rectangular parallelogram. At least this portion of the specification describes how the slanted block results in less turbulence because of a smaller angle that air flow must pass.

Independent claim 15 was discussed including the combination of elements making up the gas turbine air intake system. Claim 15 includes a gas turbine air intake system having a tube sheet, a filter element mounted on the frame and sealed against the tube sheet, and a cleaning system oriented to send a flow of pressurized fluid into the media construction through the downstream flow face and out of the first media construction through the upstream flow face. The media construction is recited as having a plurality of flutes with selected ones of the flutes being open at the first end and closed at the second end, while selected ones of the flutes are closed at the first end and open at the second end.

Independent claim 20 was discussed as being directed to a method of servicing a gas turbine air intake system. The various steps recited in the claims were summarized.

The undersigned agreed to provide a written response, including comments directed to the '443 publication. The undersigned and Mr. Gahr both appreciate the courtesy extended by Examiner Pham and Examiner Smith for the personal interview.

C. The Pending Claims Are Allowable

The Office Action rejected claims 1 - 20 and 22 under 35 U.S.C. § 103 as unpatentable over Stuble et al. '282 in view of Gillingham et al., U.S. Patent No. 5,820,646. Applicants disagree with this rejection. As mentioned above, in order to clarify the various claimed

inventions, Applicants have amended the independent claims for clarification purposes and to expedite allowance. For at least the following reasons, Applicants respectfully submit that the claims are allowable over Stuble '282 in view of Gillingham et al. '646 and the other art of record.

Stuble et al. '282 discloses an apparatus for filtering air containing textile impurities including an air-permeable, fixed collecting device having an accordion shape. The collecting device has a number of filtering portions that can be cleaned by at least one suction device. As explained in the '282 patent, individual filters can each be independently cleaned by an associated suction device 18. Each filter 15 is associated with a separate suction device 18. As mentioned above in the summary of the interview, column 5, lines 10 - 12 of the '282 patent state, "The air to be purified can be blown or sucked through the filter device 10 by air conveying means such as one fan, bellows or the like (not shown)." It is believed that this sentence refers to the air that is being cleaned, because it refers to, "the air to be purified." This passage is stating, evidently, that the air to be cleaned can be either blown through the filter device or sucked by vacuum pressure through the filter device. This passage is not referring to how the filter devices themselves are cleaned. It appears that the only disclosure of cleaning the filter devices is through the suction devices as described in the '282 patent. The '282 patent does not disclose or suggest pulse cleaning the filter devices by directing pressurized fluid through the downstream flow face.

Gillingham '646 discloses, among other things, the use of having a plurality of flutes with selected ones of the flutes being open at the first end and closed at the second end, while selected ones of the flutes are closed at the first end and open at the second end. Figure 12 in the '646 patent discloses a V-shaped filter utilizing a pair of block filter elements. It is also disclosed that the filter element 50 "may be cleaned with reverse air pulsing." (Column 8, lines 61 - 62).

U.S. Patent Publication 2004/0226443 was discussed during the interview. The '443 publication has been cited in the Supplemental Information Disclosure Statement submitted herewith. As discussed above, this publication and the currently pending application are commonly owned and were subject to assignment to the same entity (Donaldson Company, Inc.) at the time each of the inventions were made. As such, the '443 publication is not available as prior art under § 102(e)/103. The '443 publication discusses methods for cleaning air intake for a gas turbine system utilizing filter arrangements that include barrier media, usually pleated,

treated with a deposit of fine fibers. In the embodiments illustrated, for example FIGS. 21 and 22, the filter elements are pleated media formed in a tubular configuration. Each of the filter elements is in an element pair, with one of the elements being cylindrical and the second element in the pair being tubular but conical. The elements are installed against a tube sheet and are cleaned by reverse pulsing from the downstream side to the upstream side. Paragraph 92 discusses, in general, various aspects of filter structure. One of the patents discussed in paragraph 92 is Gillingham et al., U.S. Patent No. 5,820,646 (previously cited) disclosing a plurality of flutes with selected ones of the flutes being open at the first end and closed at the second end, while selected ones of the flutes are closed at the first end and open at the second end. In addition, Gillingham U.S. Design Patent No. 425,189 is cited as disclosing a panel filter having a plurality of flutes with selected ones of the flutes being open at the first end and closed at the second end, while selected ones of the flutes are closed at the first end and open at the second end.

The '443 publication, however, does not anticipate the various claimed inventions. To anticipate, the '443 publication must disclose each and every claimed element. It is respectfully submitted that the '443 publication does not do so; as such, the '443 publication does not anticipate the claims. And, as explained above, the '443 publication is not available as a reference under § 103 because at the time the invention was made, it was subject to assignment to Donaldson Company, Inc., as is the case with the currently pending application. At least some of the reasons for why the '443 publication do not anticipate the claims are discussed below.

Stuble '282, Gillingham '646, and the '443 publication do not render the claims unpatentable. Claim 1 is directed to a combination of steps in a method including, for example, cleaning the media construction by pulsing pressurized fluid into the media construction through the downstream flow face, with the pressurized fluid turning at an angle of less than 80° to flow into the downstream flow face. This step is not disclosed or suggested in Stuble et al. '282, Gillingham et al. '646. This step is not disclosed by the '443 publication.

Independent claim 9 is directed to a filter element having a combination including, among other things, the first media construction and the second media construction each include a non-rectangular parallelogram, and the first and second media constructions are angled relative to each other to form a V-configuration having an apex. Stuble et al. '282 and Gillingham et al. '646 do not disclose or suggest the invention of claim 9, including the non-rectangular

parallelogram shape of the first and second media constructions. The '443 publication does not disclose this type of construction either.

The invention of claim 15 is directed to a combination of elements including, among other things, a gas turbine air intake system frame, a first filter element mounted on the frame and sealed against the tube sheet in gas-flow communication with the aperture, and a cleaning system oriented to send a flow of pressurized fluid into the first media construction through the downstream flow face and out of the first media construction through the upstream flow face.

Stuble et al. '282 does not disclose or suggest the invention of claim 15 because it does not teach or suggest, for example, a gas turbine intake system, a filter element having media of the type claimed, and a cleaning system which sends pressurized fluid through the downstream flow face of the media construction to the upstream flow face. Gillingham et al. '646 does disclose media of the type claimed and mentions reverse-pulse cleaning, but does not disclose a gas turbine air intake system and does not disclose how such a filter element would be mounted on a frame in the gas turbine air intake system. The '443 publication discloses a gas turbine air intake system having a frame with a tube sheet. The '443 publication discloses using tubular, pleated media. There is also a discussion of media of the type claimed, but there is not clear teaching of using a filter element of media of the type claimed in a gas turbine air intake system; how it would be mounted on the gas turbine air intake system frame; and how it would be sealed against the tube sheet.

Independent claim 20 is directed to a method of servicing a gas turbine air intake system, including a combination of steps including, among other things, removing a first filter element having a first media construction and a second media construction forming a V-configuration with a non-rectangular parallelogram shape; orienting a second, new filter element into sealing engagement with the tube sheet, with the second filter element having first and second media constructions, and the first media construction and second media construction of the second filter element each forming a non-rectangular parallelogram.

Stuble et al. '282 does not disclose or suggest the invention of claim 20. For example, Stuble et al. '282 does not disclose the use of the claimed media. Gillingham et al. '646 does disclose the use of the claimed media, but not in the specific claimed configuration. The '443 publication discloses methods for filtering air for a gas turbine system, but there is no disclosure of the claimed media in a non-rectangular parallelogram shape.

For at least the above-mentioned reasons, Applicants respectfully submit that each of the independent claims is allowable. Each of the dependent claims is allowable for at least the same reasons that the independent claims is allowable.

D. Summary

In summary, claims 1 - 9 and 11 - 20 are pending. It is respectfully submitted that the amendments put the application in condition for allowance. Therefore, Applicants request entry of these amendments.

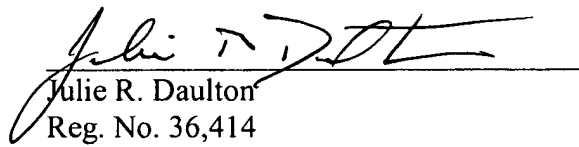
In view of the above amendments and remarks, Applicants respectfully submit that the application is in condition for allowance.

If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below listed telephone number.

Please charge any additional fees or credit overpayment to Deposit Account No. 13-2725.

Respectfully submitted,
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